# HUMAN PERFORMANCE, TRAINING & SURVIVABILITY

Empower today's warfighter by closing human performance gaps using training and survivability solutions, thereby creating tomorrow's superior warrior. HPT&S is defined broadly to include all aspects of human performance in the domains of Cognitive Performance, Physical Performance & Survivability, and Training Technology Enhancement.

### **FOCUS AREA**

## COGNITIVE PERFORMANCE ENHANCEMENT

**HPT&E STO-1:** Cognitive Performance Enhancement Methodologies and Technologies

### **PROJECT**

INVESTIGATING
INDIVIDUAL & TEAM
COGNITIVE
PERFORMANCE (D&I)

NOVICE TO EXPERT PERF: A DYNAMICAL FRAMEWORK FOR LEARNING (D&I)

A COGNITIVE NEURO APPROACH FOR ENHANCING TRAINING & PERFORMANCE (D&I) NEURAL CONTROL OF ACTIONS IN CONTEXT (D&I)

ESTABLISHING TEAM TRAINING METRICS THRU THE USE OF A VIRTUAL LAB (D&I)

### **RECENT TRANSITIONS**

#### **VIDEO FLASHLIGHT (D&I)**

TRASYS Range Instrumentation for deployment to 29 Palms MOUT facility

### MAGTF XXI TACTICAL DECISION SYSTEM (TDS) (D&I)

Transition to Expeditionary Warfare School and School of Infantry Platoon Sgt's & Ops Chief's Courses

### **Logistics TDS**

Transition to Logistics Operations School

## Close Combat Marine Close Combat Marine TDS Distributed as a CD September 2004

Marine Corps Gazette. It teaches tactics at the squad, platoon, and company level

### **Tactical Operations Marine Corps TDS**

Transitioned to the Engineer School

### First to Fight TDS

Managed effort with PM TRASYS

## Virtual Technologies and Environments (VIRTE)

Managed effort with PM TRASYS

## Virtual Technologies and Environments (VIRTE)

AAV simulator. Went from ONR prototype, directly to series production; currently being fielded as an USMC training simulator. Combat Vehicle LCAC transition to PMS 377, MCCDC in FY 04.

### PHYSICAL PERFORMANCE ENHANCEMENT & SURVIVABILITY

HPT&E STO-4: Physical Performance Enhancement Methodologies and Technologies

FP STO-1: Technology that provides improved protection for the individual against fragments, projectiles, and lasers with reduced weight and impact on ability to perform required functions

FP STO-2: Technologies for improved protection for , individuals and vehicles in a chemical, radiological, and biological environment

### TRAINING TECHNOLOGY ENHANCEMENT

**HPT&E STO-2:** Synthetic Environment Technologies

**HPT&E STO-3:** Training Technology Enhancement Tools and Technologies

COMBAT SITUATION AWARENESS (D&I)

MARINE ADVANCED COMBAT HEADBORNE SYSTEM (D&I)

COUNTER-FATIGUE INTERVENTTIONS (D&I)

WARFIGHTER
PERFORMANCE
ENHANCEMENT:
Combat Feeding and
Pharmacology (D&I)

ENVIRON,EMTAL EFFECTS ON COMBAT PERFORMANCE (E&D)

AUGMENTED REALITY SYSTEMS FOR URBAN SKILLS TRAINING (D&I) (E&D)

HUMAN ASSISTED BUIDING GENERATED SYSTEM (HABGS) (E&D)

HOSTILE OBJECTIVE PREDICTION LINKED TO IMMEDIATE TACTICAL EFFECT- HOPLITE ((E7D) INTERACTIVE IMMERSIVE CLOSED-LOOP TRAINING SYSTEM FOR MOUT (E&D)

HUMAN TECHNOLOGY INTEGRATION & ASSESSMENT (E&D)

FRONT PROJECTIVE
DISPLAYS FOR VIRTUAL
ENVIRONMENT (E&D)

AFTER ACTION REVIEW SYSTEM (E&D)